



Thin Clients

November 2003



Instructions

Using Rapport Administrative Software and Altiris Deployment Solution on the Same HP Compaq Thin Client Network

HP Compaq Thin Client t5000 Series

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Abstract

Altiris Deployment Solution and Rapport Administrative Software offer industry standard, PXE-enabled management of thin clients. Their co-existence on the same subnet, however, can present challenges resulting from perceived limitations in the Wired for Management 2.0 specification. This paper examines and provides a resolution to issues associated with running both management solutions simultaneously.

General Guidelines

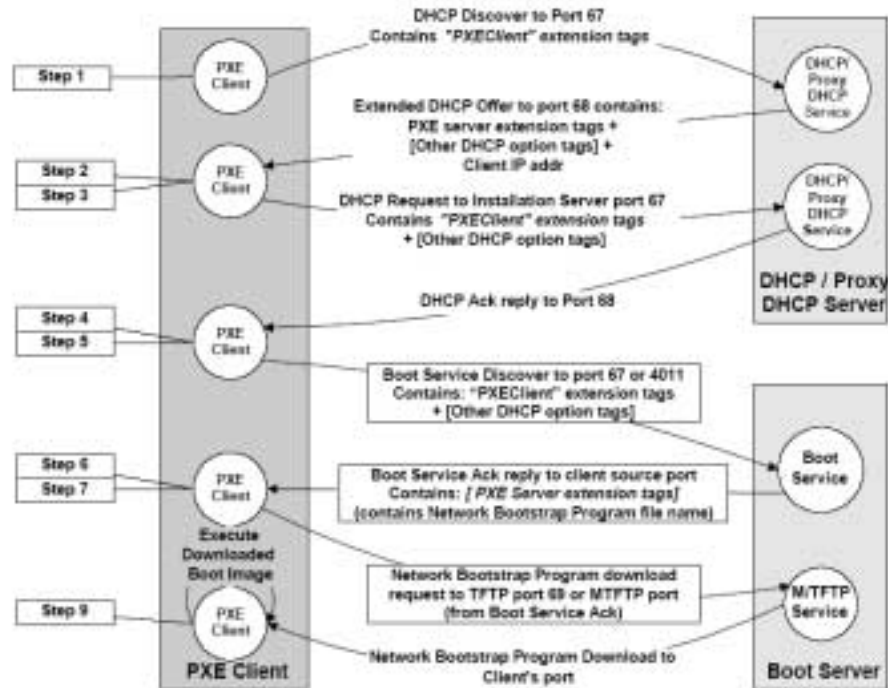
Concurrently operating Altiris and Rapport on the same network may limit functionality of either management solution in terms of imaging and command-line execution within a preboot executable environment (PXE). While several options exist, HP recommends that the Altiris BootWorks utility be installed on the thin clients where Altiris management is required and PXE services be disabled on the Altiris deployment servers. Altiris BootWorks consists of a hidden partition containing a bootable, DOS environment for imaging or executing DOS scripts.

Rapport can use PXE. This alleviates Altiris' dependency on PXE service to help deliver thin client manageability, and produce a more stable and reliable solution. Other options considered may further limit functionality of one or both manageability solutions.

Currently, BootWorks is unavailable for CE .NET. Please check www.altiris.com periodically for information regarding future releases of Altiris Deployment Solution. For more information, refer to the *Altiris Deployment Solution 5.6 Product Guide*.

PXE Boot Flowchart

The following diagram illustrates how PXE creates a DOS environment.



Recommended Practices

The following represents a method for ensuring maximum functionality of both management solutions co-existing on the same network. When the Rapport server has been configured to use PXE, the Altiris Deployment Solution PXE services should not be installed. The Altiris BootWorks partition should supersede PXE on clients managed by the Altiris server.

Rapport Setup

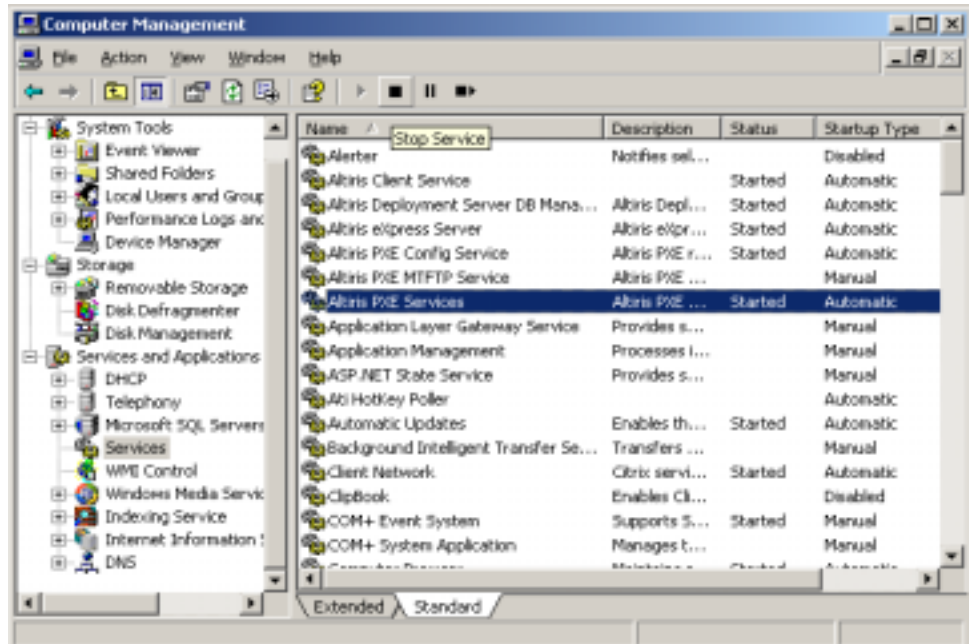
The Rapport Server must be configured to use PXE. Rapport 3.02 is automatically configured to use PXE. No options exist for deselecting PXE during installation or for disabling during operation.

Altiris Setup

If the Altiris Deployment Solution is already installed, the PXE service must be disabled. The following sections provide steps for both Microsoft Windows 2000 and 2003 Server families and Microsoft Windows NT 4.0 Server.

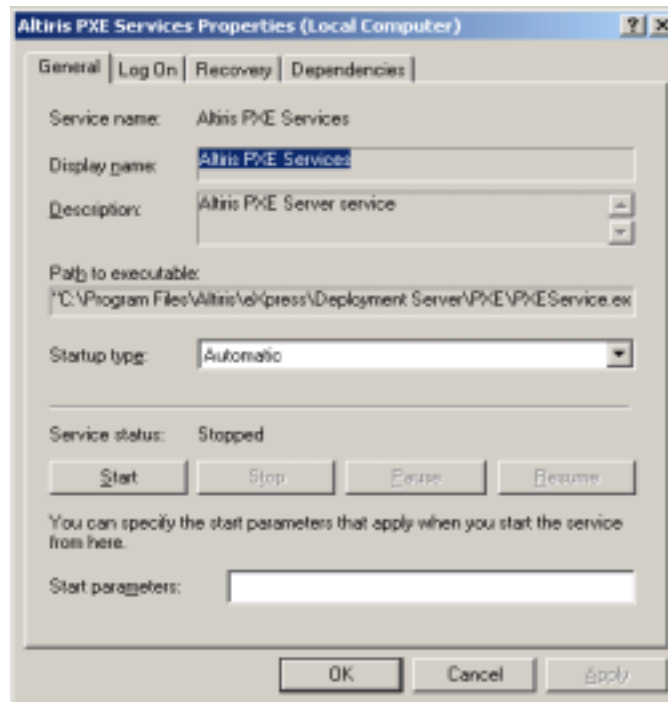
To disable PXE service for Microsoft Windows 2000 and 2003 Server families, perform the following steps:

1. Right-click **My Computer** and select **Manage**.
2. Click on **Services** in the left pane of the Window.
3. Scroll in the right pane and select **Altiris PXE Config Service**.



4. When the Altiris PXE Config Service window opens, change the Startup Type to **Disabled**.

5. Stop the service and click **OK**.



Repeat steps 3 through 5 for the Altiris PXE MTFTP Service and Altiris PXE Service.

To disable PXE service for Microsoft Windows NT 4.0 Server, perform the following steps:

1. Click on **Start > Settings > Control Panel**.
2. Double-click **Services**.
3. Scroll to **Altiris PXE Config Service** and highlight it.
4. Select **Stop** on the right side of the window.
5. After the service has stopped, double-click the **Altiris PXE Config Service**.
6. Select the **Disabled** option and choose **OK**.

Repeat steps 3 through 6 for the Altiris PXE MTFTP Service and Altiris PXE Service.

Altiris Deployment Solution Setup

If installing Altiris Deployment Solution onto an existing Rapport managed subnet, customers must select **Custom Install** and deselect the Altiris PXE service during installation. Otherwise, the Altiris PXE service will disable the Rapport PXE service.

After the Deployment Solution is installed, create a BootWorks Installer Package and deploy it to your Altiris managed clients. Use the steps outlined in the Altiris BootWorks Installation section of this document to create the installer package.

Practices to Avoid

The following scenarios will limit the functionality of one or both management solutions, as both require a DOS environment for manageability. PXE creates this environment by downloading a bootable DOS image provided by the servers. (Please see the PXE Boot Flowchart section of this paper for more information regarding this process.) When PXE is enabled on both configurations, Rapport 3.02 will cease to function whereas Rapport 4.0 will result in service collisions. While the absence of PXE service only affects imaging functionality, both solutions are still capable of managing the clients within the operating system such as deploying software, inventory collection and Wake-on-LAN functionality.

The following scenarios are not recommended by HP:

- If Rapport 4.0 PXE service is disabled, and the Altiris Server PXE service is enabled, then there will be a loss of imaging functionality on Rapport. **Rapport 3.02 does not offer disabling of PXE service as version 4.0 does.**
- If Rapport 3.02 or 4.0 has PXE enabled, Altiris has PXE disabled and BootWorks is not installed on the clients, there will be a loss of imaging and DOS scripting functionality with Altiris.
- If both Rapport and Altiris have PXE enabled, then the PXE configurations will collide and the network boot will hang.

Altiris BootWorks Installation

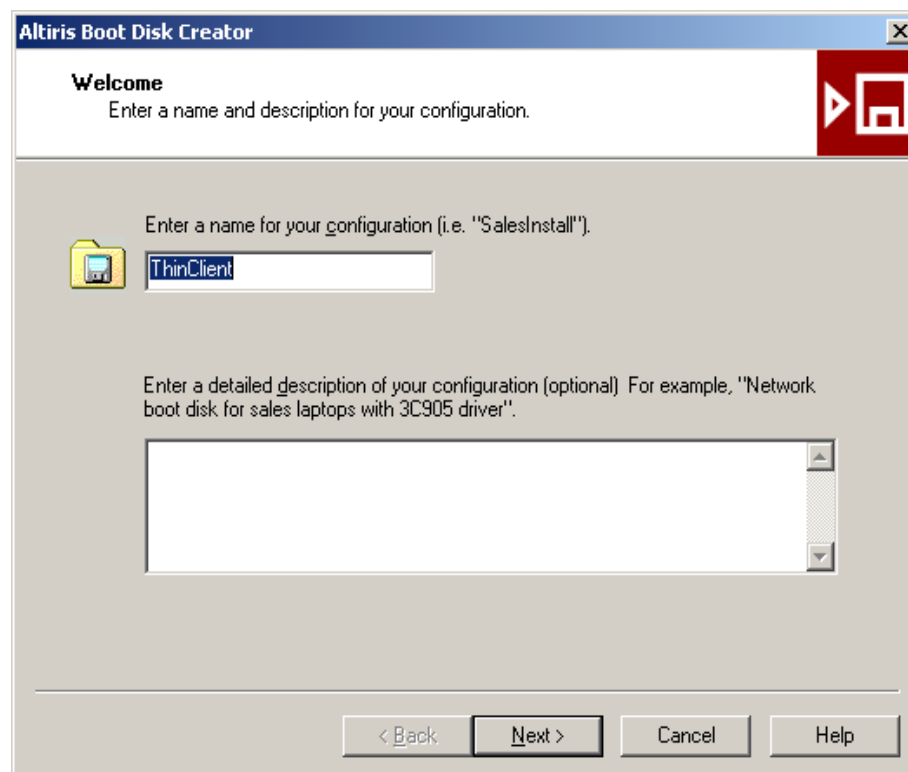
There are a few simple steps for BootWorks installation on the HP Compaq Thin Client t5000 Series. Successful installation prevents a loss of functionality from either Rapport or Altiris. For more information on BootWorks Partitons and creating packages, refer to page 224 of the *Altiris Deployment Solution 5.6 Product Guide*.

To install BootWorks, perform the following steps:

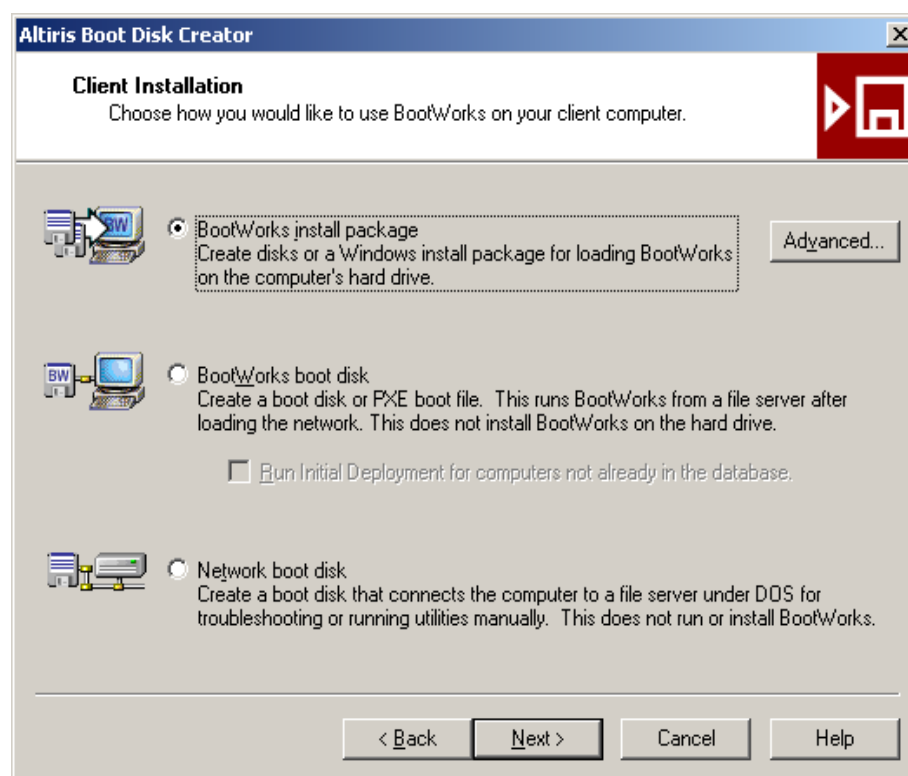
1. On the Altiris Deployment Server, select **Boot Disk Creator**.
2. When the opening selection screen pops up, choose **Create New Configuration**.



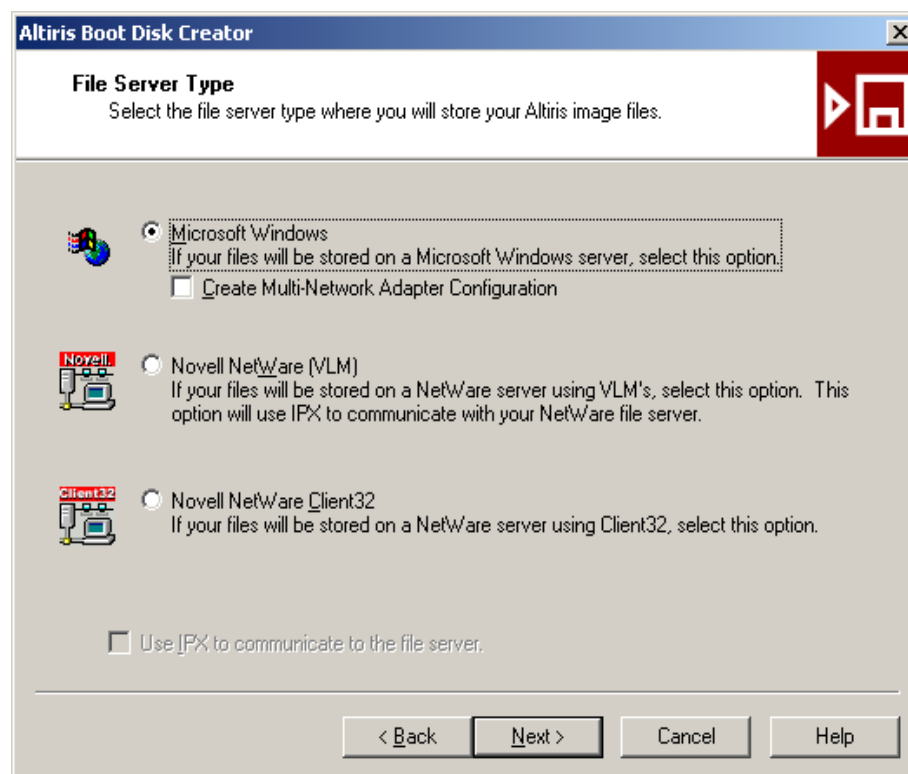
3. Enter a unique name for the configuration and a description if desired, then click **Next**.



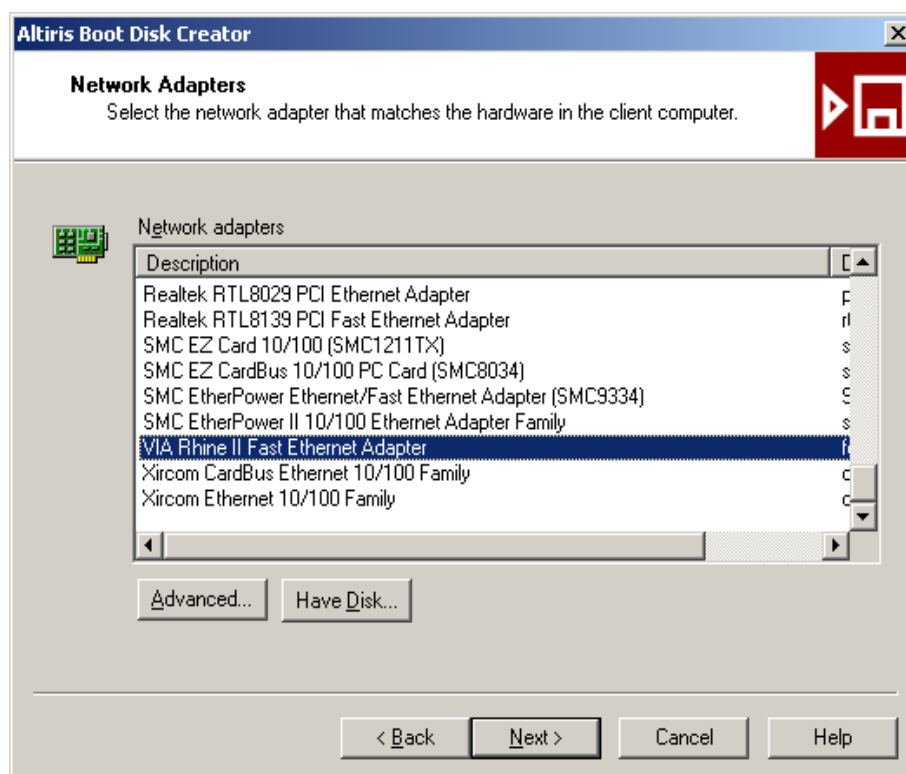
4. Select **BootWorks Install Package** and click **Next**.



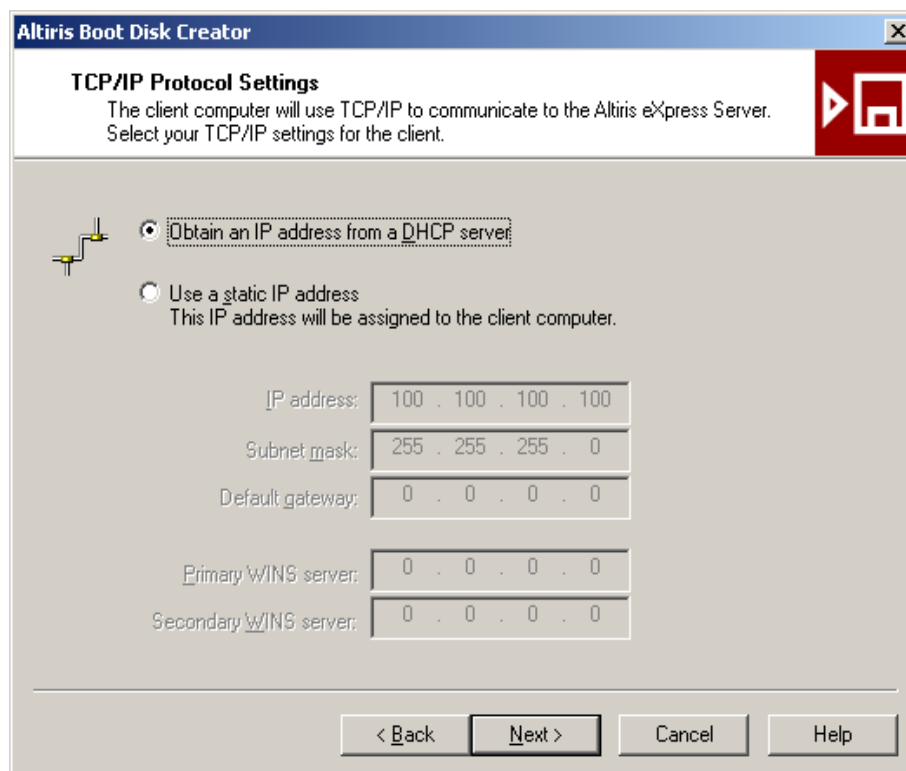
5. Choose **Microsoft Windows** and click **Next**.



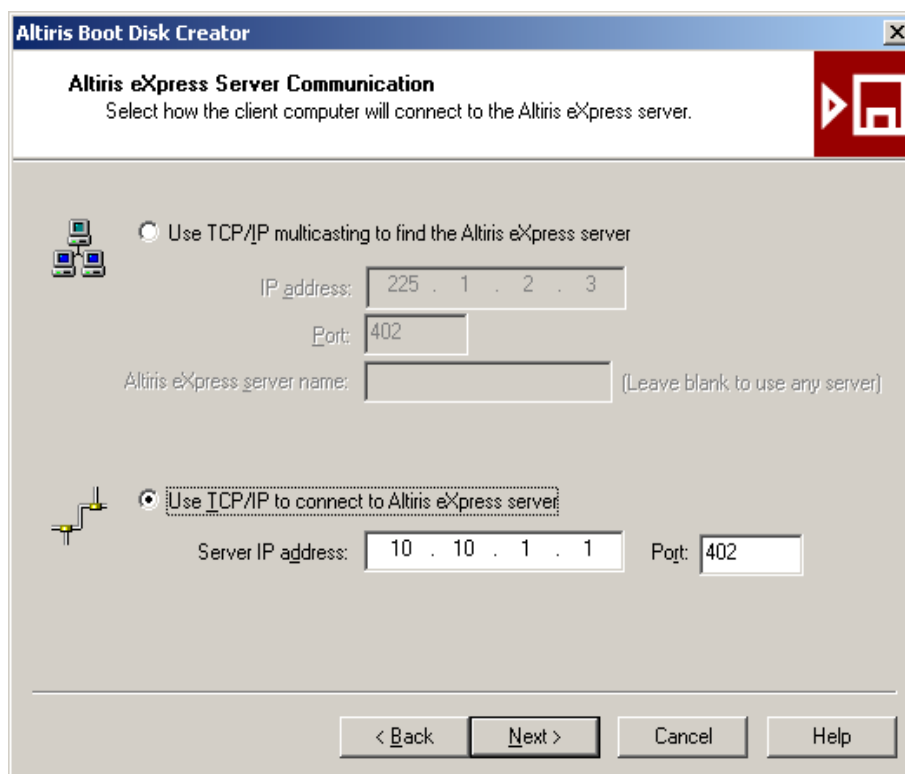
6. Select the **VIA Rhine II Fast Ethernet Adapter Driver** from the list and click **Next**.



7. Choose **Obtain an IP Address from a DHCP server** and click **Next**.

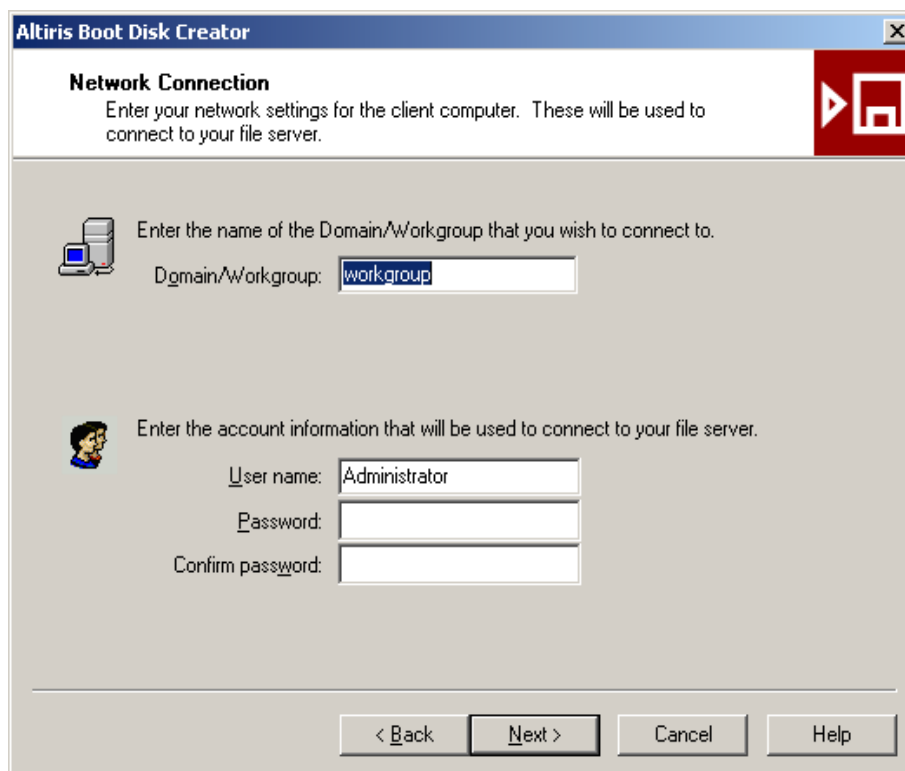


8. Select **Use TCP/IP** to connect to Altiris Express Server and click **Next**.



The screenshot shows the 'Altiris Boot Disk Creator' window with the 'Altiris eXpress Server Communication' tab selected. The instruction reads: 'Select how the client computer will connect to the Altiris eXpress server.' There are two radio button options. The first option, 'Use TCP/IP multicasting to find the Altiris eXpress server', is unselected. The second option, 'Use TCP/IP to connect to Altiris eXpress server', is selected. Below the first option, there are input fields for 'IP address' (225 . 1 . 2 . 3), 'Port' (402), and 'Altiris eXpress server name' (blank). Below the second option, there are input fields for 'Server IP address' (10 . 10 . 1 . 1) and 'Port' (402). At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

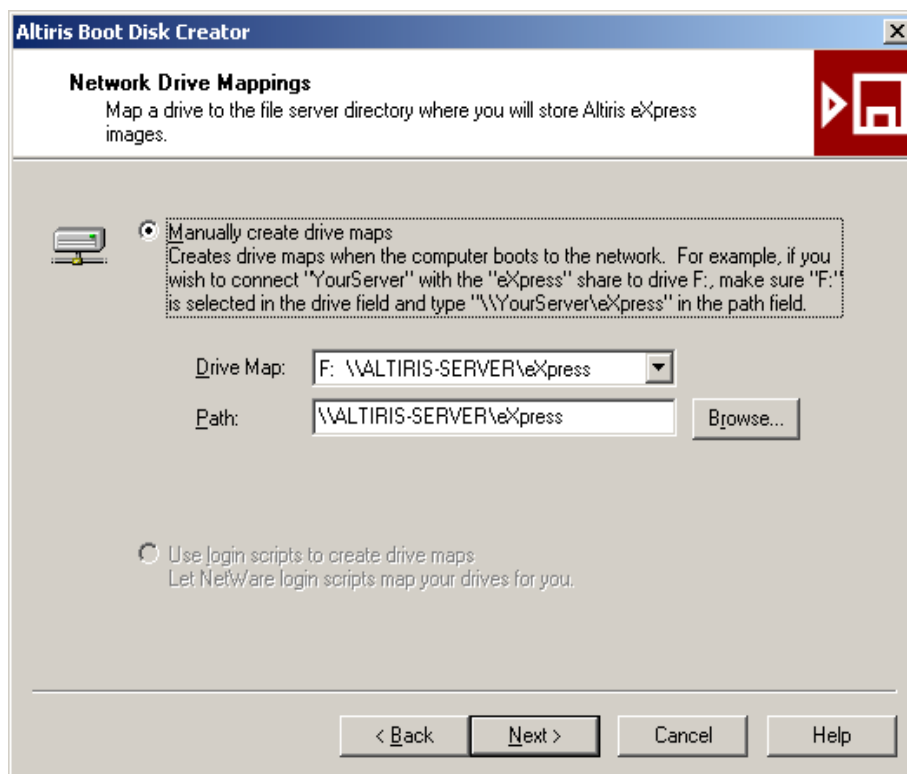
9. Enter the domain or workgroup and account privileges to connect to the server and click **Next**.



The screenshot shows the 'Altiris Boot Disk Creator' window with the 'Network Connection' tab selected. The instruction reads: 'Enter your network settings for the client computer. These will be used to connect to your file server.' There are two sections. The first section, 'Enter the name of the Domain/Workgroup that you wish to connect to.', has a 'Domain/Workgroup' input field with 'workgroup' entered. The second section, 'Enter the account information that will be used to connect to your file server.', has three input fields: 'User name' (Administrator), 'Password' (blank), and 'Confirm password' (blank). At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

10. Select **Manually Create Drive Maps**.

11. Verify the UNC path in the box is correct to the Express share on the Altiris server and click **Next**.

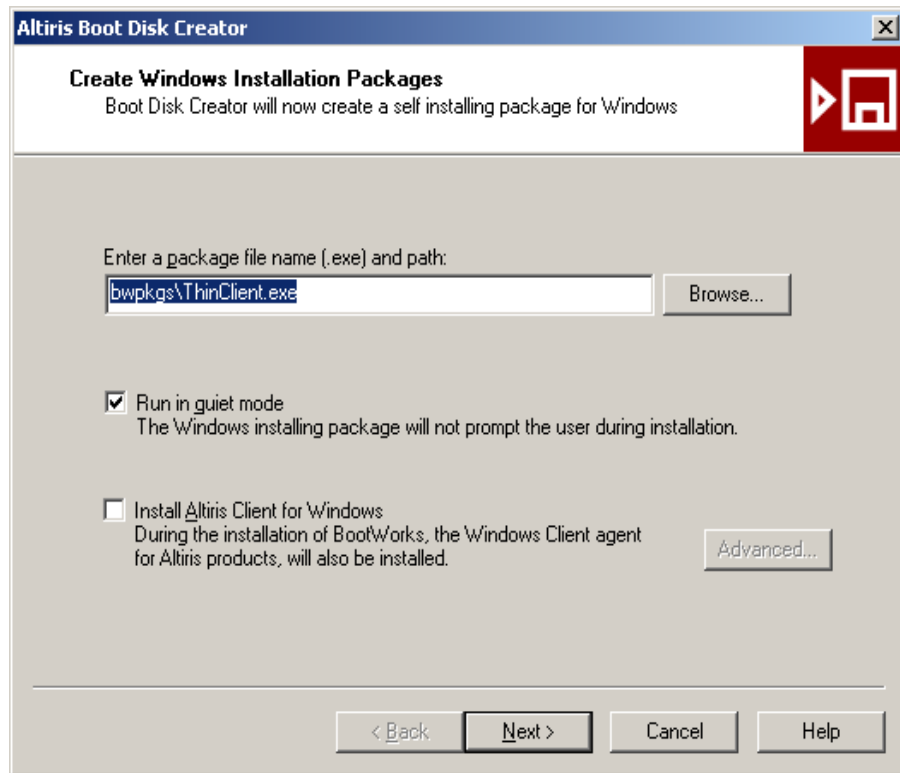


12. Verify all the information is correct on the last screen and click **Finish**.

13. On the pop-up window choose **Create a Windows Installation Package**.



14. Make sure the package name and path is correct, and click **Next**.



15. When the package is complete, click **Close** and exit the Boot Disk Creator.

This package can now be added to a job under the Distribute Software function and deployed to a client or group of clients. Refer to page 147 of the *Altiris Deployment Solution 5.6 Product Guide* for more information on creating jobs.

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